

CHAPTER 22

SEWERS

Section:

1. Definitions
2. Depositing waste on public or private property prohibited
3. Befouling waters prohibited
4. Unlawful disposal facilities prohibited
5. Use of public sewers required – penalties for violation
6. Extraterritorial jurisdiction
7. Private wastewater disposal
8. Permit for private wastewater system
9. Inspection of private wastewater system
10. Standards for private wastewater systems
11. Disconnection of private wastewater system
12. Unauthorized use of public wastewater system prohibited – permit required
13. Usage and permit fees
14. Responsible party
15. Interest charge in delinquent or past-due fees
16. Sewer connections performed by City
17. Responsibility for determination of depth of sewer
18. Form of application
19. Sewer use fees – sewer use charge system
20. Annual review of costs and revisions
21. Notification
22. Sewer construction standards

22a. Sewer construction and maintenance standards

23. Use of public sewers
24. Prohibited discharges
25. Liability for damage to system
26. Regulated discharges
27. Discharges considered public nuisances, remedies
28. Testing standards
29. Agreements for industrial waste
30. Damage to sewer system
31. Inspections
32. Industrial processes
33. Grease traps
34. Maintenance of pretreatment facilities
35. Industrial waste treatment
36. Wastewater user duty to provide information
37. Liability for city inspections
38. Inspections
39. Dispute resolution
40. Notice of violation
41. Recovery Rights

Section 22-1-1 Definitions

Unless the context specifically indicated otherwise, the meaning of the terms used in this Chapter shall be as follows:

1. Addendum A: means the document appended hereto-entitled "Calculation of User Fees Sewer Charge System." The Addendum A is incorporated by reference as a part of this Chapter.
2. Biochemical oxygen demand: (BOD) means the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at 20 degrees Centigrade, expressed in milligrams per liter.
3. Building drain: means that part of the lowest horizontal piping of a drainage system which receives the discharge from soil, waste, and other drainage pipes inside the walls of the building and conveys it to the building sewer, beginning five (5) feet (1.5 meters) outside the inner face of the building wall.
4. Building sewer: means the extension from the building drains to the Public sewer or other place of disposal also called house connection.
5. Cesspool: means an underground reservoir for liquid waste (such as household sewage).
6. Class: means a classification of volume of use as described hereinafter.
7. Combined sewer: means a sewer intended to receive both wastewater and storm of surface water.
8. Easement: means an acquired legal right for the specific use of land owned by others.
9. Floatable oil: means oil, fat, or grease in a physical state such that it will separate by gravity from wastewater by treatment in an approved pretreatment facility. Wastewater shall be considered free of floatable fat if it is properly pretreated and the wastewater does not interfere with the collection system.
10. Governing body: means the Mayor and City Council of the City of Grantsville.
11. Garbage: means all waste resulting from residences, commercial trades, or businesses and institutions. Commercial and Industrial waste shall be distinct from domestic or household sanitary wastes.
12. Heavy and light commercial, and industrial users: means any industrial or commercial user who discharges waste into the system with a higher than normal biochemical oxygen demand, or greater than normal total suspended solids.
13. Industrial wastes: means the wastewater from industrial process, trade, or business as distinct from domestic or sanitary wastes.
14. Natural outlet: means any outlet, including storm sewers and combined sewer overflows, into a watercourse, pond, ditch, lake, or other body of surface or groundwater.
15. May: is permissive (see "shall", subsections 27).
16. Person: means any individual, firm, company, association, society, corporation, or group.
17. pH: means the logarithm of the reciprocal of the hydrogen ion concentration. The concentration is the weight of hydrogen ions, in grams, per liter of solution. Neutral water, for example, has a pH value of 7 and a hydrogen-ion concentration of 10^{-7} .
18. Privy: means a small building having a bench with holes through which the user may defecate or urinate.
19. Properly shredded garbage: means the wastes from the preparation, cooking, and dispensing of food that have been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than $\frac{1}{2}$ inch (1.27 centimeters in any dimension).
20. Public sewer: means a common sewer controlled by a governmental agency or public utility.
21. Residential flows: means the assumed average and/or standard flow expected from a single-family dwelling based on wintertime culinary water usage. A residential flow volume is normally 12,500 gallons per month and its strength is 264 mg/l TSS (total Suspended Solids, see Suspended Solids) and 196 mg/l BOD₅ (Biochemical Oxygen Demand, see BOD)/ Rates for volume and strength or

Residential Flow are set out in the Addendum.

22. Sanitary sewer: means a sewer that carries liquid and water-carried wastes from residences, commercial buildings, industrial plants, and institutions together with minor quantities from ground, storm, and surface waters that are not admitted intentionally.
23. Septic tank: means a tank in which the solid matter of continuous flowing sewage is disintegrated by bacteria.
24. Sewage: means the spend water of a community. The preferred term is wastewater (see subsection 35).
25. Sewer: means a pipe or conduit that carries wastewater or drainage water.
26. Shall: is mandatory (see "May" subsection 16)
27. Slug: means any discharge of water or wastewater which in concentration of any given constituent of in quantity of flow exceeds for any period of duration longer than fifteen (15) minutes more than five (5) times the average twenty-four (24) hour concentration of flows during normal operation and shall adversely affect the collection system and/or performance of the wastewater treatment works.
28. Storm drainage: (sometimes termed "storm sewer") means a drain or sewer for conveying water, groundwater, subsurface, water, or unpolluted water from any source.
29. Superintendent: means the Superintendent of wastewater facilities, and/or of wastewater treatment works, and/or of water pollution control of the City of Grantsville or his authorized deputy, agent, or representative.
30. Suspended solids: means a total suspended matter that either floats on the surface of, or is in suspension in water, wastewater, or other liquids, and that is removable by laboratory filtering as prescribed in "Standard Methods for the Examination of Water and Wastewater" and referred to as filterable residue.
31. System: means the sewer, wastewater or combined wastewater and storm or surface water facilities of the city.
32. City: means the city of Grantsville, Tooele County, Utah.
33. Unpolluted water: means water of Quality equal to or better than the effluent criteria in effect or water that would not cause a violation of receiving water quality standards and would not be benefited by discharge to the sanitary sewers and wastewater treatment facilities provided.
34. Wastewater: means the spend water of a community. From the standpoint of source, it may be a combination of the liquid and water-carried wastes form residences, commercial buildings, industrial plants and institutions, together with any groundwater, surface water, and storm water that may be present.
35. Wastewater facilities: means the structures, equipment, and process required to collect, carry away, and treat domestic and industrial wastes and disposes of effluent.
36. Wastewater treatment works: means an arrangement of devices and structures for treating wastewater, industrial wastes, and sludge. Sometimes used as synonymous with "waste treatment plant" or wastewater treatment plant or "water pollution control plant."
37. Watercourse: means a natural or artificial channel for the passages of water either continuously or intermittently.

Section 22-1-2 Depositing waste of public or private property prohibited.

It shall be unlawful for any person to place, deposit, or permit to be deposited in any unsanitary manner on public or private property within the City of Grantsville, or in any area under the jurisdiction of said City, any human excrement, garbage, or other objectionable waste.

Section 22-1-3 Befouling waters prohibited.

It shall be unlawful to discharge to any natural outlet within the City of Grantsville, or in any area under the jurisdiction of said City, any sewage or other polluted waters, except where suitable treatment has been

provided for in accordance with subsequent provisions of this Chapter.

Section 22-1-4 Unlawful disposal facilities prohibited.

Except as hereinafter provided, it shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool, or other facility intended or used for the disposal of wastewater.

Section 22-1-5 Use of public sewers required – penalties for violation.

The owner(s) of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purposes, situated within the City and abutting on any street, alley, or right-of-way in which there is now located or in the future will be located in city public sanitary System, within 300 feet of said system, is hereby required, at the owner(s) expense, to install suitable sewer facilities therein, and to connect such facilities directly with the public sewer in accordance with the provisions of this Chapter, within 60 days after the date of official notice given by the City to do so, provided that said sewer is within 30 feet of the owner's property line. It shall be a Class "C: Misdemeanor for any person to fail to connect to the sewer system who is the occupant, owner or user of any structure whose outermost property line is within 300 feet of the sewer system and each day of failure to connect shall be deemed a separate offense.

Section 22-1-6 Extraterritorial Jurisdiction.

Under the authority of Section 10-8-15, Utah code Annotated, 953, as amended, Grantsville City hereby exercises its extraterritorial jurisdiction to protect its culinary water system and its source from exposure to underground percolation from any ecological injury, pollution or contamination of the watershed or exposure of the System and water-polluting underground percolation influencing the culinary waterworks source. Grantsville City under authority of Sections 10-8-38, Utah code Annotated as amended, declares that all lands, (whether inside or outside the incorporated limits of Grantsville City) within 300 feet on either side of collections or interceptor line and the inlet facilities or one or any combination of the same (the system) are a part of the wastewater facilities of Grantsville City and System and the City hereby requires that the owner or occupant of any land upon which any structure is located on the nearest property line of any kind within 300 feet of any lateral, interceptor or collection portion of the System shall connect to the System, the failure of which shall constitute a public offense and punishable by law as a Class "B" Misdemeanor.

Sections 22-1-7 Private wastewater disposal

Where a public sanitary or combined sewer is not available under the provisions of Sections 22-1-5, the building sewer shall be connected to a private wastewater disposal system complying with the provisions of this Chapter and applicable State and county Codes.

Sections 22-1-8 Permit for private wastewater system

Before commencement of construction of a private wastewater disposal system the owner(s) shall first obtain a written permit issued by the City's water and sewer superintendent. The application for such permit shall be made on a form furnished by the City, which the application shall supplement, by any plan specifications and other information as deemed necessary. A permit and inspection fee shall be paid to the City at the time the application is filed.

Section 22-1-9 Inspection of private wastewater system

Permission to use the system for a private wastewater disposal system shall not become authorized until the installation is completed in compliance with the approved plans applicable with all State and County Codes and this Chapter. Authorized City employees shall be allowed to inspect the work at any stage of construction. The applicant for the permit shall notify the City Offices when the work is ready for final inspections, and before any

underground, portions are covered. The inspection shall be made within forty-eight (48) hours of the receipt of notice by the City Offices.

Section 22-1-10 Standards for private wastewater system

The type, capacities, location and layout of a private wastewater disposal system shall comply with all recommendations of the Utah State Department of Environmental Quality or the Local Health Department. No permit shall be issued for any private wastewater disposal system employing subsurface soil absorption facilities where the area of the lot is less than 10,000 square feet. No septic tank or cesspool shall be permitted to discharge to any natural outlet. The owner of a private wastewater system shall operate and maintain the private disposal facilities in a sanitary manner at all times, and at no expense to the City. No requirement contained in this Chapter shall be construed to interfere with the requirements that are imposed by the Utah State Department of Environmental Quality or the Local Health Department.

Section 22-1-11 Disconnection of private wastewater system

At such time as a public sewer becomes available to a property served by a private wastewater disposal system, as provided in this Chapter, a direct connection shall be made to the public sewer within twelve (12) months, in compliance with this Chapter, and the private disposal system shall be disconnected and made inoperable.

Section 22-1-12 Unauthorized use of public wastewater system prohibited – permit required

No unauthorized person(s) shall uncover, make any connections with or opening into, use, alter, or disturb any public sewer or wastewater system or appurtenance thereto without first obtaining a written permit from the City.

Section 22-1-13 usage and permit fee

Usage fees shall be governed by a basic determinant of the amount of culinary water used at the premises as measured by each culinary water meter as follows:

- a. For residential services, up to 8,000 gallons per month.
- b. Amounts in excess of 8,000 gallons per month shall be charged a surcharge based upon the formulas set out in Addendum "A."

In every case, the owner(s) or agents shall make application on a form obtained from the City. The permit application shall be supplemented by any plans, specifications, or other information considered pertinent in the judgement of the City water and sewer Superintendent.

Section 22-1-14 Responsible party

Irrespective of the occupant, user, tenant, co-tenant, permissive user, or any other person, firm, partnership, corporation or entity being in possession of the premises to which a connection is supplied or service made available, the owner of the premises according to the records of the Tooele County recorder shall be legally responsible for the payment of all charges, fees, assessments and any other payment of all charges, fees, assessments, and other obligation or liability of a user. If any delinquent sewer connection, sewer user, charge, repairs, maintenance, or any other obligation shall be deemed by the Grantsville City as a lien upon all of the real property on which any use is made from a sewer connection. Water services to delinquent property shall be turned off by the City for failure to pay any and all sewage and wastewater fees, assessments, charges or liability and will not be turned on again to those premises where a delinquency occurs unless and until all liabilities to the City for sewer services are paid in full. All payments for utilities, whether "water" or "sewer" shall be credited first to sewer assessments, fee or charge.

Sections 22-1-15 Sewer service billing – delinquent or past due bills

Charges for sewer service shall be rendered each month at established rates on the same bill with City water or garbage bill. Each bill shall show separately the amount of the sewer service charges from the water and garbage bill, by the total thereof shall be considered one charge for the combined use of the sewer, water or garbage service. The portion of the bill rendered for sewer service cannot be paid separately from the portion rendered for the other City services. Payments for sewer and other City services are due at the Grantsville City Offices prior to the time that the next month's service billing is prepared by the City. A 1 ½ percent late fee shall be added to all delinquent accounts at the time the next month's service billing is prepared by the City. A separate late fee shall be assessed against each residential units. In the event that the sewer, water or garbage charges, late fees, interest charges and a \$25.00 fee to cover the expenses of restoring water service shall be paid in full to the city. In the event, a deposit has been made securing the payment of charges for City service. Said deposit may be forfeited to the City in the amount delinquent and due the City. The City Recorder may waive late fees if he or she determines that there is good cause for the waiver of said charges.

Sections 22-1-16 Sewer connections performed by city

The City Water and Sewer Superintendent, at any time may require that the City perform the work and supply the materials for any requested connection to the City's sewer system. When the City has determined to perform the work for the sewer connection, the applicant shall pay the City the full costs of the work prior to any work being performed by the City. The costs of said connection should be determined by the City council of its designee. The Superintendent of Sewers shall determine the extend of the work to be performed by the City under this section and any remaining work necessary to provide sewer service shall be performed by the applicant. If the City performs all of the work necessary for a sewer connection in a City street or right of way, no bond shall be required by the applicant. The construction costs for the sewer connection as provided for in this section are in addition to the permit, connection or inspection fees required in Section 22-1-13.

Section 22-1-17 Responsibility for determination of depth of sewer

The owner of any property or authorized agent, who applies to the City for a sewer connection permit, shall prior to the commencement of any work and prior to obtaining a sewer connection permit, determine the depth of the main sewer line that the proposed connection is to be made to. The depth along with the elevations of all contemplated fixtures shall be supplied to the City at the time of the application for a sewer connection permit. The City will then determine the grade for the lateral and the owner will be required to make such changes to the depths of the fixtures proposed on the property to provide the elevations required by the City. No permit shall be issued for, not shall any connection be made with the sewer line where the fixtures on the property owner and his authorized agent shall be responsible for any and all damage or claims that may result from their failure to comply with the above procedures.

Section 22-1-18 for applications

Each person owning, occupying or having an interest in any structure in Grantsville City, the property line of which is within 300 feet of the sewer line shall connect to the sewer system upon an application in the form hereinafter set our Grantsville City application for sewer connection

I hereby apply to the municipality of Grantsville City, Tooele County, Utah (The "City) from permission to connect my premises at within the Grantsville City Wastewater System and hereby agree as follows:

1. (a) The City shall make the requested connection from its sewer main to and including the distance and up to my property line. I agree to pay the City such connection fees as may be fixed by the Governing Body by resolution or ordinance, including also a security deposit charge, if so provided. The work of extending the sewer connection from the nearest point to which the city installs its

main to the place at which the sewer is to be used shall be performed at my sole cost and as directed by the City.

(b) Location of the service, whether on my premises or at some point near my premises, may be decided solely by the City.

(c) The connection so made by Grantsville City shall remain the property of the Municipality at all times and the Municipality shall have access thereto at all times.

2. I understand the City reserves the right to cause the wastewater system upon my premises to be inspected by the City and if the facility should not be approved, I will cause the same to be corrected and improve at my own expense to meet the requirements of the City or of any other governmental agency having jurisdiction to regulate the water or wastewater system within the City.
3. I will be bound by the rulers, regulations, resolutions or ordinances enacted now or hereafter by the City applicable to the City's wastewater system.
4. The main purpose for which the sewer connection will be used is for wastewater use.
5. The City shall have free access to the lines and services installed under this agreement and at reasonable times, through my property, if necessary.

Dated this _____ day of _____,
20____.

Applicant

Section 22-1-19 Sewer use fees – sewer use charge system.

Attached to this Chapter as an addendum is a document entitled "Grantsville City User Charge System", Addendum "A." Addendum "A" is incorporated by reference and made a part of the Chapter and part of the Ordinances of Grantsville City and its title shall be known and is may be referred to as Addendum "A," "Calculation of User Fees- Sewer Use Charge System" or merely, "Addendum A" in any document, pleading, or proceeding pertaining to the sewer or wastewater system of Grantsville City. References to Addendum "A" shall also be made when there is ambiguous declarations or statements in this or any ordinance of Grantsville City, Utah and any resolutions or proceeding affecting the Grantsville City sewer and wastewater system. The rates for connecting to and use on any other basis may be fixed and amended by Resolution or Ordinance. Until otherwise provided by Resolution or an amending Ordinance, the rates shall be as follows:

- A. Residential users: a minimum of \$20.00 per month per connection, active or inactive.
- B. Users in excess of 8,000 gallons per month: a fee to be calculated using Addendum "A", surcharge rates.

The Governing Body will, to promote equity in distribution of operation and maintenance costs, and for no other purpose, establish rates based entirely upon metered winter usage, effluent strength by or solely upon the basis as defined herein above or upon an equitable combination of any of those so that the costs of operation and maintenance reflected in rates will be equitably distributed among those based upon their usage of and benefit received from the System.

All costs and expenses incidental to the installation and connection of the building sewer shall be borne by the owner(s). The owner(s) shall indemnify the City from any loss or damage that may directly or indirectly by occasioned by the installation of the building sewer.

Section 22-1-20 Annual review of costs and revisions

The City shall review the total annual cost of operation and maintenance, long-term debt service relating to the wastewater treatment works, as well as each user's wastewater contribution percentage not less often than every year, and will revise the user charge system as necessary to assure equity of the system established herein and to assure that sufficient funds are obtained from the City's user charge system to : (a) adequately operate and maintain the wastewater treatment works; and (b) cover said debt service. The City will apply excessive revenues collected from a class of users to the costs of operation and maintenance attributable to that class for the next year, and adjust this rate accordingly. The addendum attached hereto and entitled "Grantsville City User Charge System" shall be used for calculating rates, fees, and charges for connection, use and access to the system. The addendum is adopted and made a part of this Chapter.

Section 22-1-21 Notification

Each user will be notified , at least annually, in conjunction with a regular bill, of the rate and that portion of the user charges, which are attributable to the wastewater treatment services (operation and maintenance) and for debt service.

Section 22-1-22 Sewer construction standards

1. A separate and independent building sewer shall be provided for every building; except where one building stands at the rear of another or an interior lot and no private sewer is available or can be constructed to the rear building through an adjoining alley, court, yard, or driveway, the building sewer from the front building may be extended to the rear building and the whole system will be considered as one building sewer. The City does not and will not assume any obligation or responsibility for damage caused by or resulting from any such single connection mentioned herein.
2. Old building sewers may be used in connection with new buildings only when they are examined and tested by the City sewer and water superintendent and found to meet all requirements of this Chapter. The size, slope, alignment, materials or construction of all sanitary sewers including building sewers, and the methods to be used in excavating, placing of the pipe, jointing, testing, and back filling the trench, shall all conform to the requirements of the building and plumbing code or other applicable rules and regulations of the City, County and the State of Utah. In the absence of these code provisions or in amplification, the materials and procedures set forth in appropriate specifications of the A.S.T.M. and W.P.C.F. Manual of Practice Number 9 shall not apply.
3. No person(s) shall make connection of roof downspouts, foundation drains, areaway drains, or other sources of surface runoff or groundwater to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer unless such connection is approved by the City and the Utah State Department of Environmental Quality for purposes of disposal or polluted surface drainage.
4. The connection of the building sewer into the public sewer shall conform to the requirements of the building and plumbing code or other applicable rules and regulations of the City, and the State of Utah, or the procedures set forth in appropriate specifications of nationally recognized publications of what are known as the A.S.T.M. and the W.P.C.F. Manual of Practice Number 9. All such connections shall be made gas-tight and water-tight, any deviation from the prescribed procedures and materials must be approved by the City before installation.
5. All excavations for building sewer installation shall be adequately guarded with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways, and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the City.

Section 22-1-23 Use of public sewers

No person shall discharge or cause the discharge of any unpolluted waters such as storm water, surface water, groundwater, roof runoff, subsurface drainage, or cooling water to any sewer, except storm water runoff from limited areas, which storm water may be polluted at times, may be discharged to the sanitary sewer by

permission of the city and the State Department of Environmental Quality. Storm water other than exempted in this Section and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as combined sewers or storm sewers, or to natural outlet approved by the city and the Utah State Department of Environmental Quality. Unpolluted industrial cooling water or process waters shall also be discharged, to a storm sewer, combined sewer, or natural outlet.

Section 22-1-24 Prohibited discharge

No person shall discharge or cause to be discharged any of the following described water or wastes to any public sewer: (a) any gasoline, benzene, naphtha, fuel oil, or other flammable or explosive liquid, solid or gas; (b) any waters containing toxic or poisonous solids, liquids, or other wastes, to contaminate or interrupt any sewage treatment process, constitute a hazard in or have an adverse effect on the waters receiving any discharge from the works; (c) any waters or wastes having a pH lower than 5.5 or having any other corrosive property capable of causing damage or hazard to structures, equipment, and personnel of the wastewater works; and (d) solid or viscous substances in quantities or of such size capable of causing obstruction to the flow in sewers, or other interference mud, straw, shavings, metal, glass, rags, feathers, tar, plastic, wood, underground, garbage, whole blood, paunch manure, hair and flesh, entrails, paper dishes, cups, milk containers, etc., either whole or ground by garbage grinders.

Section 22-1-25 Liability for damage to system

Each user which discharges any toxic pollutants which causes damage to the System or to the Grantsville Treatment works shall be liable to the City for such damage and for all expenses incurred by the City in repairing those facilities.

Section 22-1-26 Regulated discharges

The following described substances, materials, waters, or wastes shall be limited in discharges to the municipal system to concentrations or quantities which will not harm either the sewers, the sludge of any municipal system, the wastewater treatment process or equipment, will not have an adverse effect on the receiving stream, or will not otherwise endanger lives, public property or constitute a nuisance, the City may set limitations more severe than the limitations established in the regulations below if such more severe limitations are necessary to meet the above objectives. In setting these requirements the City will give consideration to such factors as the quantity of subject waste in relation to flows and velocities in the sewers, materials of construction of the sewers, the wastewater treatment process employed, capacity of the sewers, capacity of the wastewater treatment plant, and other pertinent factors. The limitations or restrictions on materials or characteristics of waste or wastewater discharged to the sanitary sewer which shall not be violated without approval of the City are as follows:

- a. Wastewater having a temperature higher than 150 degrees Fahrenheit (65 degrees Celsius).
- b. Wastewater containing more than 25 milligrams per liter of petroleum oil, non-biodegradable cutting oils, or products of mineral oil origin.
- c. Wastewater from industrial plants containing floatable oils, fat or grease.
- d. Any garbage that has not been properly shredded (see Section 22-1-1(20)). Garbage grinders may be connected to sanitary sewers from homes, hotels, institutions, restaurants, hospitals, catering establishments, or similar places where garbage originates from the preparation of food in commercial kitchens for the purpose consumption on the premises.
- e. Any waters or wastes containing iron, chromium, copper, zinc and similar objectionable or toxic substances to such a degree that any such material received in the composite wastewater at the wastewater treatment works exceeds the limits established by the State for such materials.
- f. Any waters or wastes containing odor-producing substances exceeding limits which may be established in compliance with applicable State or Federal regulations.

- g. Any radioactive wastes or isotopes of such half-life of concentration as may exceed limits established in compliance with applicable State or Federal regulations.
- h. Quantities of flow, concentrations, or both which constitute a "slug" as defined herein.
- i. Water or wastes containing substances which are not amenable to treatment or reduction by the wastewater treatment process employed or are amenable to treatment only to such degree that the wastewater treatment plant effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters.
- j. Any waters or wastes which, by interaction with other water or wastes in the public sewer system, release obnoxious gases, from suspended solids which interfere with the collection system, or create a condition deleterious to structures and treatment processes.

Section 22-1-27 Discharges considered public nuisances, remedies.

If any water or wastes are discharged, or are proposed to be discharged to the public sewers, which waters contained the substances or possess the characteristics enumerated in Section 22-1-26, and which are determined by the City to have a deleterious effect upon the wastewater facilities, process, equipment, or receiving waters, or which otherwise create a hazard to life or constitute a public nuisance, the City may:

- a. Reject the wastes;
- b. Require pretreatment to an acceptable condition or discharge to the public sewers;
- c. Require control over the quantities and rates of discharge, and/or wastes not covered by existing taxes or sewer charges under the provisions of this Chapter. If the City permits the pretreatment or equalization of waste flows, the design and installation of the plants and equipment shall be subject to the review and approval of the City and the Utah State Department of Environment Quality;
- d. Require submission of a plot plan of sewers of the user's property showing sewer and pretreatment facility location;
- e. Require submission of details of wastewater pretreatment facilities;
- f. Require details of systems to prevent and control the losses of materials through spills to the municipal sewer.

Section 22-1-28 Testing standards.

All measurements, tests, and analysis of the characteristics of waters and wastes to which reference is made in this Chapter shall be determined in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater", published by the American Public Health Association. Sampling methods, location, times, duration, and frequencies are to be determined on an individual basis subject to approval by the City.

Section 22-1-29 Agreements for industrial waste.

No statement contained in this article shall be construed as preventing any special agreement or arrangement between the City and any industrial concern whereby an industrial waste of unusual strength or character may be accepted by the City for treatment.

Section 22-1-30 Damage to sewer system.

No persons shall maliciously, willfully, or negligently break, damage, destroy, uncover, deface, or tamper with any structure, appurtenances or equipment which is a part of the wastewater facilities. Any person violating this provision shall be subject to immediate arrest under charge of disorderly conduct.

Section 22-1-31 Inspections.

Duly authorized employees of the City bearing proper credentials and identification shall be permitted to enter all properties for the purpose of inspection, observation, measurement, sampling, and testing pertinent to

discharge to the wastewater collection system in accordance with the provisions of this Chapter.

Section 22-1-32 Industrial process.

Duly authorized City employees are authorized to obtain information concerning industrial processes which have a direct bearing on the kind and source of discharge to the wastewater collection system. Industrial users may withhold information when they have established that the revelation of said information to the public might result in an advantage to competitors.

Section 22-1-33 Grease traps.

Grease, oil and sand interceptors shall be provided when liquid wastes containing floatable grease in excessive amounts as specified in Regulated Discharge Section 22-1-26©, or any flammable wastes, sand or other harmful ingredients are introduced into public sewers; except that such interceptors shall not be required for private living quarters of dwelling units. All interceptors shall be of a type and capacity approved by the Utah State Plumbing Code, and shall be located as to be readily and easily accessible for cleaning and inspection. In the maintaining of these interceptors, the owner (s) shall be responsible for the proper removal and disposal by appropriate means of the captured materials and shall maintain records of the dates and means of disposal which are subject to review by the City. Any removal and hauling of the collected materials not performed by owner(s) personnel must be performed by currently licensed waste disposal firms.

Section 22-1-34 Maintenance or pretreatment facilities.

Where pretreatment or flow-equalization facilities are provided or required for any water or wastes, they shall be maintained continuously in satisfactory and effective operation by the owner (s) at its expense.

Section 22-1-35 Industrial waste treatment.

When determined necessary by the city the owner(s) of any property serviced by a building sewer carrying industrial wastes shall install a suitable structure together with such necessary meters and other appurtenances in the building sewer to facilitate observation, sampling, and measurement of the wastes. Such structures, when required, shall be accessibly and safely located and shall be structured in accordance with plans approved by the City. The structure shall be installed by the owner at his expense, and shall be maintained by him so as to be safe and accessible at all times.

Section 22-1-36 Wastewater user duty to provide information.

The City may require any user of sewer services to provide information needed to determine compliance with this Chapter. These requirements include:

1. Waste waters discharge peak rate and volume over a specific time period.
2. Chemical analysis of wastewater.
3. Information on raw materials, processes, and products affecting wastewater volume and quality.
4. Quantity and disposition of liquid, sludge, oil, solvent, or other material important to sewer control.

The City in its discretion may also collect samples to provide properties referred to herein, duly, authorized employees of the City shall observe all safety rules applicable to the premises established by the company, and the company shall be held harmless of injury or property damage asserted against the company growing out of the gauging and sampling operation, except as such may be caused by negligence or failure of the company to maintain safe conditions.

Section 22-1-37 Liability for city inspections

While performing the necessary work on private properties referred to herein, duly, authorized employees of the City shall observe all safety rules applicable to the premises established by the company, and the company shall be held harmless of injury or death to the City employees, and the City Shall indemnify the company against loss or damage to its property by City employees and against liability claims and demands for personal injury or property damage asserted against the company growing out of the gauging and sampling operation, except as such may be caused by negligence or failure of the company to maintain safe conditions.

Section 22-1-38 Inspections

Duly authorized employees of the City bearing proper credentials and identification shall be permitted to enter all private properties through which the City holds a duly negotiated easement for the purposes of, but not limited to, inspection, observation, measurement, sampling, repair and maintenance of any portion of the wastewater facilities lying within said easement. All entry and subsequent work, of any, on said easement, shall be done in full accordance with the terms of the duly negotiated easement pertaining to the private property involved.

Section 22-1-39 Dispute resolution

The Governing Body shall act upon all issues or differences between the City and sewer users on matters concerning interpretation and execution of the provisions of this Chapter.

Section 22-1-40 Notice of violation

Any person found to be violating any provision of this Chapter shall be provided by the City with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time states in such notice, permanently cease all violations.

Section 22-1-41 Extension of sewer lines – recovery rights. (repealed 3-22-2000 see Land Use Mangement Cody Chapter 22)

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Grantsville City

Calculations of User Fees

The user charge system (UCS) is the method of assessing fees to the users of the sewer system. The UCS is based on a residential equivalent, i.e. the flow or quality (B.O.D or S.S.) of sewage equivalent to "normal" household sewage.

Note that the bolded numbers are given information. All other numbers are calculated.

A. Number of connections

Residential Users, RU 1,359

Commercial Users, CU 115

Industrial Users, IU 3

B. Current flow per residence

Average daily flow per residence, (Q), gal/day 267

Equivalent Residential Unit*,

ERU=30 days/months x Q, (gal/mo) 8,000

*Note: An Equivalent Residential Unit, ERU, is the quantity of wastewater generated by an average residence.

C. Estimated average flow from other users

The third column, ERUs, equivalent residential units, Equates the flow from a given establishment to the flows from a "normal" residence.

USER CLASSIFICATION	USAGE (gal/mo)	ERU'S (eq)
Church	8,000	1.0
Stake Maintenance	53,000	6.6
Elementary School	162,000	20.3
Middle School	50,000	6.3
High School	194,000	24.3
Multiple Units	8,000	1.0/units
Beauty Shops	8,000	1.0
Commercial	8,000	1.0
Motels	8,000	1.0
Light Industrial	51,000	6.4
Light Industrial	152,000	19.0
Light Industrial	412,000	51.5
School (Park)	12,000	1.5
Trailer Courts	8,000	1.0/unit

*ERU = USAGE/RU

$$20.3 = 162,000/8,000$$

D. Proportional share of O & M

The first column is a classification of each type of user connected to the sewer system. The second column is an inventory of each type of connection on the system. The third column is identical to the third column of Section C. the fourth column gives the total equivalent residential units for each type of connection. The fifth column gives the percent of the total equivalent residential units for each type of connection.

USER CLASSIFICATION	CONNS (conn)	ERU/CONN (eq/conn)	ERUs (eq)	PERCENT (%)
Residences *	1359	1.0	1,359.0	66.2
Churches	4	1.0	4.0	0.2
Stake Maintenance	1	6.6	6.6	0.3
Elementary School	2	20.3	40.6	2.0
Middle School	1	6.3	6.3	0.3
High School	2	24.3	48.6	2.4
Multiple Units	45(225)	1.0/units	225.0	11.0
Beauty Shops	6	1.0	6.0	0.3
Commercial	41	1.0	41.0	2.0
Motels	1(2)	1.0/units	2.0	0.1
Light Industrial	1	6.4	6.4	0.3
Light Industrial	1	19.0	19.0	0.9
Light Industrial	1	51.5	51.5	2.5

School (Park)	2	1.5	3.0	0.1
Trailer Courts	10(233)	1.0/units	233.0	11.4
TOTAL	1,477			

E. Itemization of O & M costs

This section presents the budget for the operation and maintenance of the wastewater system.

Labor	\$ 91,000
Materials	\$ 12,000
Utilities	\$ 35,300
Services	\$ 42,000
Repairs	\$ 33,000
Collections	\$ 20,000
Capital Recovery Fund (CRF)	\$ 23,300
Total, annual	\$256,600
Total, monthly, C om	\$ 21,383

F. Itemization of loan service

This section identifies the amount that must be applied to loan service.

Existing debt	\$ 27,223
New debt	\$ 164,000
TOTAL, annual	\$ 191,223
TOTAL monthly, C L	\$ 15,935

G. Total cost of wastewater system

Per year	\$ 447,823
Per year	\$ 37,318
Per year	\$ 20,000*

H. Cost per equivalent residential user C eru

The cost of the wastewater system per ERU was calculated as follows:

$$C_{eru} = (C_{om} + C_L) / ERUs$$

$$*\$20,000 = (\$17,250 + \$15,935) / 1658.9$$

$$**\$18.20 = (21,383 + 15,935) / 2,052$$

* User charge rate established by ordinances in 1194**Recalculated user charge rate, 1999

I. Rate schedule

The following is the rate assessed to each type of user. Note that the total rate is approximately equal to the Total Cost of Wastewater System as presented in Section G.

USER CLASSIFICATION	MONTHLY COST, CUMULATIVE	MONTHLY COST, PER USER
Residences	\$21,180	\$20.00
Churches	\$80	\$25.00
Stake maintenance	\$240	\$240.00
Elementary School	\$840	\$100.00
Middle School	\$100	\$310.00
High School	\$310	\$20.00
Multiple Units	\$5,310	\$32.00
Beauty Shops	\$120	\$32.00
Commercial	\$768	\$20.00
Motels	\$40	\$60.00
Light Industrial	\$60	\$120.00
Light Industrial	\$120	\$400.00
Light Industrial	\$400	\$20.00
Trailer Courts	\$3,600	
TOTAL	\$33,168	

$$\text{Cost} = (\text{C eru}) \times \text{Conns}$$

$$\$21,180 = (\$20.00 \times \$1,059)$$

Surcharge rates

The surcharge rates should be used for any non-residential user whose flow exceeds 8000 gallons per month, B.O.D. exceeds 196 mg/l per month, or whose suspended soils (S.S.) are determined by sampling the discharge of the user to the collection system.

a. Cost proportion for main constituent, P

This section identifies the percentage for the total cost of treatment attributable to each of the three categories, i.e. 52% percent of the total cost of the wastewater system is to convey the flow.

CONSTITUTENT	PERCENT (P)
Flow	52.0
B.O.D.	32.0
Suspended Soils (S.S.)	16.0
TOTAL	100.0

b. Characteristics of equivalent residential unit

This section presents the "normal" characteristics of an equivalent residential unit.

CONSTITUENT	FLOW(gal/m o)	CONC (mg/l)	LOAD (lbs/mo)
Flow, (Q)	8000	-----	-----
B.O.D.	-----	196	20.43
Suspended Soil, (S.S.)	-----	264	27.52

Load (lbs/mo) = Conc (mg/l) x Q (gal/mo) x 8.34 x 1.0 x 10 to the negative 6

20.43 = 196 x 8,000 x 8.34 x 1.0 x 10 to the negative 6

c. Cost to treat equivalent residential unit, C eru 20.00

This is from Section H of the Calculation of User Fees.

d. **Cost of each constituent per unit, Cu**

This section gives the total cost of handling a unit quantity, i.e. 1000 gallons of flow, on pound of B.O.D. and one pound of S.S.

CONSTITUENT	(\$/1000 GAL)	(\$/LB)
Flow, (Q)*	0.832	-----
B.O.D. **	-----	0.313
Suspended Solids (S.S)**	-----	0.116

*Cu(flow) = (Ceru x P) / (Q/1000)

\$0.832 = (\$20.00 x .52) / (8,000/1,000)

**Cu(B.O.D. or S.S.) = (C eru x P) / Load

\$0.313 = (\$20.00 x .32) / 20.43

$$\$0.116 = (\$20.00 \times .16) / 27.52$$

e. **Cost for each gallon**

TABLE 1: SURCHARGE RATES FOR FLOW, (Q)

FLOW (GALLONS)		COST (\$)
FROM	TO	
1	1000	0.416
1001	2000	1.248
2001	3000	2.080
3001	4000	2.912
4001	5000	3.744
5001	6000	4.576
6001	7000	5.408
7001	8000	6.240
8001	9000	7.072
9001	10000	7.904
10001	11000	8.736
11001	12000	9.568
12001	13000	10.400
13001	14000	11.232
14001	15000	12.064
15001	16000	12.896
16001	17000	13.728
17001	18000	14.560
18001	19000	15.392
19001	20000	16.224
20001	21000	17.056
21001	22000	17.888
22001	23000	18.720
23001	24000	19.552
24001	25000	20.834

General Equation: $\text{Cost} = Q_{\text{avg}} \times C_u(\text{flow})/1000$

Q_{avg} is the average of the above flow increment, i.e. $(1001 + 2000)/2 = 1500$

a. **Cost of B.O.D. per each mg/l**

TABLE 2: SURCHARGE RATES FOR B.O.D

CONCENTRATION OF B.O.D. (mg/l)		COST (\$)
FROM	TO	
1	100	0.132
101	200	0.393
201	300	0.654
301	400	0.915

401	500	1.176
501	600	1.437
601	700	1.698
701	800	1.959
801	900	2.220
901	1000	2.481
1001	1100	2.742
1101	1200	3.003
1201	1300	3.264
1301	1400	3.525
1401	1500	3.786
1501	1600	4.047
1601	1700	4.308
1701	1800	4.570
1801	1900	4.831
1901	2000	5.092

General Equation: $\text{Cost} = .001 \times C_{\text{avg}} \times C_u(\text{BOD}) \times 8.34$

C_{avg} is the average of the above concentration increment,

i.e. $(201 + 300)/2=250$

b. Cost of S.S. per each mg/l

TABLE 3: SURCHARGE RATES FOR S.S.

CONCENTRATION OF S.S. (mg/l)		Cost (\$)
FROM	TO	
1	100	0.049
101	200	0.146
201	300	0.242
301	400	0.339
401	500	0.436
501	600	0.533
601	700	0.629
701	800	0.726
801	900	0.823
901	1000	0.920
1001	1100	1.016

1101	1200	1.113
1201	1300	1.210
1301	1400	1.307
1401	1500	1.403
1501	1600	1.500
1601	1700	1.597
1701	1800	1.694
1801	1900	1.790
1901	2000	1.887

General equation: $\text{Cost} = .001 \times \text{Cavg} \times \text{Cu (S.S.)} \times 8.34$

Cavg is the average of the above concentration increment,
i.e. $(201+300)/2 = 250$

Surcharge can be determined by using either Section D, Cost of Each Constituent Per Unit, as shown in Section H of the User Charge Fees or using the Tables in Sections E, F, and G of the Surcharge rates as shown in Section I.

c. Example for determining surcharge – using cost of Each Constituent per Unit.

Assume an industry discharges wastewater with the following characteristics:

Flow: 20,000 gal/mo

B.O.D.: 500 mg/l

S.S.: 700 mg/l

FLOW: To find the cost for flow, use the cost per thousand gallons in Section D.

$20,000 \text{ (gal/mo)} \times \$0.832/1,000 \text{ gal} = 16.64$

B.O.D.: To find the cost for B.O.D., multiply the pounds of B.O.D. by the cost of B.O.D. per pound in section D.

$20,000 \text{ (gal/mo)} / 1,000,000 \times 500 \text{ (mg/l)} \times 8.34 \times \$0.313 \text{ (/lb)} = \$26.10$

S.S.: To find the cost for S.S., multiply the pounds of S.S. by the cost of S.S. per pound in Section D

$20,000 \text{ (gal/mo)} / 10,000,000 \times 700 \text{ (mg/l)} \times 8.34 \times \$0.116 \text{ (/lb)} = \$13.56$

TOTAL BILLING:

Flow: \$16.64

B.O.D.: \$26.10

S.S.: \$13.54

TOTAL: \$56.28

**A. Example for determining surcharge – using
Rate Tables for flow, B.O.D., and S.S.**

Assume an industry

discharges wastewater
with the following
characteristics:

Flow: 20,000 gal/mo

B.O.D.: 500 mg/l

S.S.: 700 mg/l

Flow: To find the costs
for flow look up the flow
in Table 1 Section E.

From 19,001 to 20,000

\$16.22

B.O.D.: To find the cost
of B.O.D. look up the
B.O.D. in Table 2,

Section F. From 401 to

500 \$1.176

Multiply
the
cost
per
1,000
gallons
by
the
number
of
gallons
divided
by
1,000.

\$1.176

x

(20,000/1,000)

=

\$23.52

S.S.: To find the cost of
S.S. look up the S.S. in
Table 3, Section G.

From 601 to 700 \$0.629

Multiply
the
cost
per

1,000
gallons
by
the
number
of
gallons
divided
by
1,000.

Total Billing:
Flow: \$16.22
B.O.D.: \$23.52
S.S.: \$12.58
TOTAL: \$52.32

Reconciliation of Surcharges

The City's monthly wastewater O&M revenue can be calculated by reconciling the surcharges.
Monthly flow from Grantsville City ERUs x Q = Monthly Flow
 $1,658 \times 8,000 = 20,736,250$
Revenue based on surcharge of flows

CONSTITUENT	CONC	SURCHARGE	X FLOW	= REVENUE
	(mg/l)	(\$/1000 gal)	(1000 gal)	(\$)
Flow*	-----	0.832	20,736	\$17,525
B.O.D.**	196	0.313	20,736	\$6,490
S.S.**	264	0.116	20,736	\$2,405
TOTAL				\$26,147

*The surcharge used for flow is the average of the cost of 0-1000 and 1001-2000.

**The surcharges used for B.O.D. and S.S. are the average of the cost of 101-200 and 201-300, respectively.